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**The Impact of Debt-Equity Swaps on the Domestic
Economy: The Brazilian Case**

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The Impact of Debt-Equity Swaps on the Domestic Economy:
The Brazilian Case

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ABSTRACT

Debt-equity swaps have been heralded as a market solution which can bring about a reduction of the burden of external debt which afflicts many Third World countries. This paper examines the impact of a debt conversion program on the domestic economy of the debtor country, focusing on the Brazilian case. In particular, this work retraces the emergence of debt-for-equity swaps, the secondary market for LDC debt, and the perspectives for an increase of debt conversions in Brazil. The domestic effects studied here relate to the impact on the Brazilian stock market, the question of denationalization, as well as the effects on the domestic rate of inflation, interest rates, and exchange rates.

THE IMPACT OF DEBT-EQUITY SWAPS ON THE DOMESTIC ECONOMY: THE BRAZILIAN CASE

I. INTRODUCTION

The motivation behind the present work relates to the analysis of a recent market solution proposed as an alternative or as a complementary strategy to deal with the Third World debt problem. This alternative is the so-called debt-for-equity swap, i.e., the conversion of external debt into domestic claims to be used for investment purposes. Debt-equity swaps have been heralded as an innovative approach which can bring about a reduction in the absolute level of external debt for Third World countries. This paper analyzes the viability of such a program in the Brazilian case.

In the following section of this paper, the international context in which debt conversion made its appearance is presented. In addition, we describe the debt conversion scheme in more detail as well as the functioning of the secondary market for Less Developed Countries' debt. Finally, in this section reference is made to some of the advantages and disadvantages involved in the conversion of the debt.

The third section discusses the Brazilian experience with debt conversion prior to the announcement of a broad program in November 1987. This discussion includes the experience before 1982, the increasing volume of conversions between 1982 and 1984, and the setbacks from 1984 onward.

In the fourth section, some institutional and legal aspects of the new Brazilian program of debt conversion are discussed. In addition,

in this section we examine eventual domestic impacts of the new program of debt conversion.

Finally, based upon the Brazilian experience, the debt conversion approach is evaluated as an alternative or a complementary strategy for the solution of the debt problem.

II. THE EMERGENCE OF DEBT-FOR-EQUITY SWAPS

The International Context in the Early 1980s

When Mexico declared its moratorium in August 1982, the degree of tension that had built up in the international financial system since the late 1970s was high enough for the recognition of a generalized debt crisis. Academic and market analysts, however, have been unable to reach a consensus with respect to the factors leading to the debt crisis. One interpretation suggests that the crisis in the international financial system in the early 1980s was a by-product of international commodity shocks interacting with the erratic behavior of the international monetary system, as well as of the macroeconomic policies adopted by the developed countries, in particular the U.S., in their effort to reign on high and rising inflation rates.

At the conference on International Debt and Central Banking in October 1983, most of the debt experts agreed that the causes of the debt crisis were beyond the traditional explanation of the oil shocks (1974 and 1979).¹ Likewise, there was agreement upon the idea that borrowing countries were not solely responsible for the international debt problems. The policies of the developed countries, which generated acute rises in the interest rates, coupled with increased

protectionism and fluctuations in the exchange rates, were thought to have played an important role in the emergence of the debt problem.

For an understanding of the debt crisis, as well as of the imaginative solutions that have been proposed by the international financial community, an examination of the evolution of the composition of financial flows in the last two decades is required. After 1973, an increasing reliance on capital flows from private banks not only for trade financing purposes, but mainly for development and balance of payments adjustment, left the developing countries in a vulnerable situation regarding the evolution of international interest rates and inflation, throughout the 1970s and up to the present. The composition of the international capital flows from developed to developing countries, provided in Chart I, shows the increasing participation of commercial bank lending, from 19 percent in 1970 to 25 percent and 28 percent in 1975 and 1982, respectively. A closer analysis of the major borrowers, such as Brazil, provides a much worse picture: the participation of debt from commercial banks rose from 42.0 percent in 1970 to 80.5 percent in 1978 (see Table II-1). This increased reliance on commercial bank funds, as stated above, helped to trigger the international debt problems of the early 1980s.² The 1980s arrived with the major commercial banks presenting a high degree of exposure to developing country loans. As is shown in Table II-2, the exposure of the largest nine American banks with respect to Eastern Europe and nonoil LDCs increased from 188.2 percent in 1977 to 235.2 percent of their capital in 1982.³ The total exposure for the same group of banks and borrowers was around US \$68.194 billion. As the data in Table II-2

show, the banks' exposure profile between the end of the 1970s and the beginning of the 1980s did not change abruptly. A radical change, however, took place in the way which the banks reassessed their existing exposure problem.

After the Poland crisis in 1981, Mexico's moratorium in 1982 and the Malvinas (Falklands) War in 1982, the same levels of exposure that until then represented a profitability indicator, had suddenly turned into a risk measure. These liquidity crises casted serious doubts on the ability of major borrowers to service their debts. This new attitude brought about the idea that a country with a high level of foreign indebtedness had to be avoided by prospective lenders. Consequently, very few nations had access to new voluntary lending in the international financial markets.⁴ As a corollary, most LDCs had to face serious liquidity constraints from 1982 onwards. New flows of capital to the LDCs were made conditional to domestic adjustment programs under monitoring of the IMF.

Although the IMF's response to the international crisis was relatively prompt, in the sense of pressuring the international banks to lend conditionally, its policies were revealed to be not very effective.⁵

Since 1982 several alternatives have been proposed for the solution of the debt problem, but little progress has been made. However, with the persistency of the liquidity and solvency problems, at least the creditor parties have become more flexible in sharing part of the losses. In this context, the debt conversion and capitalization proposal has emerged as an alternative to the management of debt problem.

This proposal has generated the interest of international banks, some concerns among major debtors and an overall feeling of skepticism among international analysts.

Debt-for-Equity Swaps

The debt for equity swap operation emerged during the liquidity crisis of 1982, when the commercial banks reassessed their degrees of exposure, putting a lid on new spontaneous lending to Less Developing Countries (LDCs). The idea behind such an operation is to convert international debt denominated in foreign currency, usually U.S. dollars, into domestic claims, which are to be used for investment purposes.

In simple terms, the deal involves three parties: buyers, sellers and local institutions. The buyer, say, an American investor, purchases the debt at a discount from the original holder of the loan, e.g., a commercial bank. Then the investor sells the dollar denominated debt back to the local government, receiving assets denominated in domestic currency. However, the local government does not pay the face value of the debt, it rather earns a discount. At the end, the investor will have received a "subsidy" for investing in that specific country, which equals the original discount minus the charges imposed by the local government.⁶

The demand for equity swaps of a specific country might come either from its residents with access to foreign exchange, or from foreigners willing to invest in that country. The size of the original discount, the local charges, the expected movement of the exchange rate, and

especially the country's economic and political prospects, should affect the demand for debt-equity swaps.

The Secondary Market for LDC Debt

At the core of operations such as debt-equity swaps or more generally debt conversions⁷ is the development of a secondary market for LDC debt. Centered in London and New York, the secondary market has played a role in helping to provide liquidity for commercial banks' portfolios.

Among the few brokers and intermediaries actively trading in the very beginning of this market, back in 1983, was a joint venture between the European Inter American Finance Corporation (EURINAM) and the U.K. merchant bank Singer & Friedlander. Their deals⁸ helped to bring the attention of bankers and the international press to the incipient secondary market of LDC debt. The initial sellers were mainly the highly provisioned European and Middle-Eastern banks, i.e., banks with high loan-loss reserves, as well as the regional U.S. commercial banks, whose intention was to get such LDC loans off their books.

Although the market remains small, it has changed rapidly during its short existence. It was initially quite limited, and quotations on the discounted debt have been treated as artificial due to the thinness of the market. In the last two years, however, the market has become better organized, participation has widened, and the transactions have been diversified. The participation is estimated to have increased from US \$2 billion in 1984 to US \$8 billion in 1987 (see Chart II). In relation to Latin America's external debt of US \$380 billion, it represents 2.1 percent, which shows how embryonic the market remains.

New interpretations of accounting rules and changes in the banking regulation in the U.S. have contributed to the development of the market.⁹ A bank taking a loss on a cashing or swap of a LDC loan would not be required to reduce the book value of the remaining loans to that specific country, provided the bank previously split up its loans into separate portfolios.¹⁰ However, the accounting profession in the U.S. has not reached an agreement as to how to deal with this "contamination problem."

The inflection point for this secondary market may have occurred in May 1987, when John Reed--Citicorp's chairman--announced the massive provision of US \$3 billion to face the potential losses against LDC debt.¹¹ This movement, followed by other money center banks, marked the beginning of direct participation in the market by U.S. commercial banks as suppliers of loans.¹² The impact of such announcement was fully reflected in the swing down of quotation prices. Countries like Argentina, Brazil and Mexico, whose debt at market prices in the fourth quarter of 1986 were at 65¢, 76¢, and 55.5¢ to the dollar, respectively, had their prices quoted at 35.5¢, 38¢ and 49¢ in the fourth quarter of 1987 (see Table II-3).

Potential Advantages and Disadvantages

The development of an active secondary market in debt instruments of LDCs offers advantages for all sides: lenders, borrowers and investors. The commercial banks may be able to transform their previous bad credits, kept at the artificial face value in their books, into a realistic and potential source of profits to be earned. The

foreign investor, wishing to buy assets or to recapitalize its own investments in a debtor country, obtains local currency at a discount.

Finally, the debtor country can take advantage of this market through a conversion scheme in several ways. First, by either reducing the stock or the rate of growth of its external debt. Second, by attracting flight capital as well as attracting foreign direct investment. Third, by transforming a situation of net capital exporter through the service of its debt into a situation of less certain outflows associated with private direct investment, through repatriation of profits.

However, such an appealing device has also potential disadvantages. In the following sections of the paper, some of the disadvantages will be discussed in the context of the Brazilian experience. For the time being, it suffices to mention three of the major disadvantages for the LDCs: the denationalization impact; the monetary impact; and the pressure upon the domestic public deficit.

Despite the potential disadvantages, the Latin American governments appear, with some degree of caution, to have begun to endorse the idea. Until 1987, Chile and Mexico were the mainstays of the debt-equity swap market, with a total of around US \$3 billion of debt retired between them. Recently, Argentina, Brazil and Venezuela have announced new programs. Outside Latin America, other programs are unfolding. The Philippines have the most advanced, and the idea is also gaining momentum in Africa.¹³

III. THE BRAZILIAN EXPERIENCE

Debt Conversions in Brazil up to 1984

The Brazilian experience with debt conversions gained momentum after the foreign exchange crisis in that country, which unfolded in the Autumn of 1982. At that point in time the external debt indicators for Brazil reflected the disruption in the international financial system, and showed as well a nation whose reliance on debt-led growth had brought about an unsustainable situation. In Table II-1 the evolution of some major debt indicators for the Brazilian economy throughout the 1970s and the beginning of the 1980s is provided. We can also see the increasing share of commercial bank lending in the total medium and long-term capital flows to Brazil. This latter pattern is not only important for the understanding of the external difficulties in the beginning of 1980s, but also for the understanding of the important role played by commercial banks in motivating debt conversion proposals.

The conversion of debt into investment was not a qualitative innovation for the Brazilian economy in 1982. In fact, the conversion mechanism existed before; however, it was considered very much marginal in volume. From 1978 to 1981 the annual average of conversions as a percentage of total foreign investment (including loans and financing) was around 5.9 percent (see Table III-1). There were no restrictions for debt conversions before 1982. However, the inexistence of a secondary market for LDC's debt implied the absence of market incentives for conversions, i.e., the major incentive--discount--was not present. In 1982, fiscal incentives for debt conversion were enhanced with the creation of a financial line of credit corresponding to 10 percent of

the value of principal and interest capitalized in the first semester of 1983.¹⁴ This incentive was subsequently extended until the end of 1984.¹⁵

This fiscal incentive, as well as the lack of restrictions regarding the period of permanence required for the capital converted, helps to explain a record volume of conversions in 1984 of US \$745.6 million (see Table III-1). Nevertheless, from 1984 onwards the Brazilian authorities apparently realized that through debt conversion the country was substituting debt conversions for traditional foreign investment (loan financing and direct investments). Still in Table III-1, we can see that debt conversions, as a percentage of total foreign investment, increased from 9.5 percent in 1982 to 60.3 percent in 1984. Despite the rationale of the Brazilian government, one could argue that debt conversions between 1982 and 1984 to some extent filled the blank left by voluntary lending and foreign direct investment.

Debt Conversion Setbacks in 1984

The pace in which the debt conversion was being carried on between 1982 and 1984 was interpreted by the Brazilian authorities not only as being a disincentive to traditional foreign investment, but also as jeopardizing the rescheduling agreements in 1983. In that year, under the monitoring of the IMF, Brazil and its foreign creditors established a four-point financial package.¹⁶ The first two points of this package, the so-called Project I and Project II, were being threatened by the increasing volume of conversions. The two projects were (1) a "Jumbo-Loan" of US \$4.4 billion to be provided by commercial banks in

proportion to their outstanding credits to Brazil (Project I); and (2) the rescheduling of medium and long-term principal payments to commercial banks falling due in 1983, for a period of eight to nine years (Project II).

The Brazilian policymakers' rationale was that through accelerated debt conversions the commercial banks were reducing their degree of exposure to Brazilian loans, and consequently affecting the volume of rescue loans to be provided (Project I). Furthermore, the possibility of immediate repatriation of converted credits made the agreements on the rescheduling (Project II) seem vulnerable to creditors' pressures.

In order to slow down the unfolding consequences of the debt conversion scheme, the Brazilian Central Bank severely restricted these operations in 1984.¹⁷ Among the restrictions imposed on debt conversions were (i) debt conversion operations became restricted only to the original holders of the Brazilian loans; (ii) the repatriation of converted credits was allowed only if obeying the repayment schedule assigned to the original credit; (iii) transference of converted credits ownership was not allowed during the minimum period of permanence within the country; (iv) repatriation of any other investment previously made by the agent of conversion was not permitted during the minimum period of permanence.

The restrictive measures undertaken in 1984 led to a significant decline in the volume of conversions. This volume dropped from US \$745.6 million in 1984 to US \$220 million in 1986 (see Table III-1). Another consequence from the new attitude toward debt conversions was a larger participation of commercial banks. While almost 83 percent

of Brazilian medium and long-term public debt was originally in hands of private sources in 1982, mainly commercial banks, their share in the conversions for the year of 1983 was no more than 8 percent of the total. The other 92 percent converted in 1983 was due to Inter-companies. After the Circular-Letter 1125-11/9/84, the international banks lead the debt conversions in Brazil with 68 percent in 1985 and 84 percent in 1986. Table III-2 provides the breakdown of converted credits, by object and agent, between 1983 and 1986. We can see in this table the increasing participation of commercial banks in debt conversion deals. Furthermore, it suggests that the debt conversions in Brazil after 1984 were working mainly as a means for international banks to recapitalize their branches within that country.

Prospects of Debt Conversion in Brazil

Only in late November 1987 Brazil's National Monetary Council approved a new debt conversion program. The government policymakers adopted a less restrictive posture aimed at helping debt conversions to become an important source of attraction of foreign investment into the country. Many Brazilian businesses, including subsidiaries of multinational corporations, came to expect the new debt conversion program to provide an essential source of finance in a country lacking long-term funds at reasonable economic costs. The FIRCE (Central Bank's Department of Foreign Capital Regulation and Supervision) expects US \$2 billion to be converted annually.

However, the achievement of foreign capital attraction will depend crucially upon the economic and political prospects of the country.

The recent evidence seems to endorse an optimistic attitude toward debt conversions.¹⁸ In the economic sphere, after the failure of the heterodox reform named the "Cruzado Plan," and the return to a stagflation scenario in 1987, the government is pushing toward more orthodox macroeconomic policies. The Brazilian government not only has sought to reassure the international financial community and the IMF by putting a halt on the debt moratorium in November 1987, but also is committing itself to the adoption of more restrictive fiscal measures to cut down the budget deficit.

IV. THE DOMESTIC IMPACT OF THE DEBT CONVERSION PROGRAM

The New Debt Conversion Program

The new Brazilian debt conversion program, approved in late November 1987, was finally made official through the Central Bank resolution No. 1460 in February 1988. Under this new program, a total sum of US \$67.4 billion of the Brazilian foreign debt will be eligible for conversion. A large portion of these credits--US \$25 billion--will be made available under monthly auctions of US \$150 million each.¹⁹ The winning proposal will be the one which offers the largest discount, i.e., the discount to be earned by the government over the face value of the credit in domestic currency.²⁰ This US \$25 billion covers bank loans that have already matured, i.e., credits already due, and respective interest charges which were still on deposit at the Central Bank (see Regulations' Table under Brazilian eligible debt). The remaining US \$42.43 billion covers outstanding debt from the private sector (US \$10.13 billion) as well as outstanding debt from the Brazilian public sector (US \$32.3 billion).

The investors eligible to convert Brazilian credits are non-residents and foreign creditors. Differently from other countries, such as Argentina, Chile and Mexico, the Brazilian program does not allow residents to participate directly in the conversions. The rationale for permitting residents to participate is the reversion of capital flight. However, the Brazilian capital flight, compared to other Latin American countries, has been fairly small (see Table IV-1).²¹ Furthermore, the Brazilian government controls the foreign exchange market, with the parallel (black) market playing only a marginal role. This implies that in principle the only Brazilian residents with access to foreign exchange are exporters and importers. Thus, the Brazilian policymakers argue that if importers and exporters were allowed to participate in the debt conversion scheme, they would be encouraged to overinvoice imports or underinvoice exports in order to be able to purchase Brazilian foreign debt in the international secondary market.

In sum, the non direct participation of Brazilian residents in debt conversion seems to be an adequate regulatory measure. Note that the residents are going to participate not only by intermediating debt-equity operations, but also they would take advantage of the available medium and long-term funds. This latter benefit mainly arises with the participation of foreign capital conversion funds in the Brazilian stock market.

The credits converted in Brazil through the new program must remain in the country for a period of 12 years from the date of capitalization. The schedule of remittance of profits and dividends in

the initial four years will be subject to the balance of payments situation.

The Impact on the Brazilian Stock Market

The Brazilian stock market, Latin America's largest market in terms of market capitalization, is in a position to benefit from the new conversion program. The program permits the conversion of foreign debt to acquire equity securities on Brazil's stock exchanges. The foreign investors, however, are not allowed to participate directly in the market--their participation will be through the foreign capital conversion funds. These funds may be managed by national investment banks, or international banks with branches or affiliates within the country.²²

Furthermore, the new debt conversion program represents an attractive alternative for the foreign investor willing to participate in the Brazilian capital market. The renewed interest of international investors in the Brazilian market in the last couple of years, despite the political and economic instability of that nation, is related to the increasing supervision of the markets, the better information systems, as well as the fact that most of the stocks are presenting low P/E ratios.

The Denationalization Impact

Debt conversions, taken as a serious alternative for the Brazilian external debt problem, present some political problems. This constraint emerges mainly from the potential denationalization impact. The stock of foreign direct investment in Brazil amounted to US \$27.9

billion in December 1986 (see Table IV-2). In a nation with an estimated external debt of US \$130 billion at year-end 1987, and a total amount eligible for conversion of US \$67.4 billion, the very success of the debt conversion strategy would represent a substantial increase in foreign ownership of local businesses. Even with the retirement of the eligible debt, this might imply a more than 100 percent increase in the stock of foreign investment in Brazil.

As a measure to appease the sectors of society concerned with this potential denationalization impact, the Brazilian program sets limits for the participation of foreign capital conversion funds. These funds may not hold more than 5 percent of the voting capital or more than 20 percent of the total capital of any one company. The investment opportunities outside the stock market are restricted to the following categories: new subsidiaries of multinational corporations; new companies of mixed capital (joint ventures--51 percent national capital); development of new projects and expansion of existing ones. Besides that, the participation of foreign capital is not allowed in areas considered of national security and economic strategy (i.e., broadcasting, information management, etc.).

The purpose of the Brazilian program is to foster direct investment, essentially by attracting foreign capital, but at the same time to restrict or avoid the substitution of existing national capital. Albeit the endeavor of the Brazilian authorities is to reduce the potential denationalization impact, this will still constitute a delicate political issue in the years ahead.

The Impact on Inflation and Interest Rates

One of the key constraints of the debt conversion strategy refers to its possible inflationary impact. The debt conversions themselves are inflationary only to the extent that the Central Bank converts dollar denominated debt into domestic currency, which automatically increases the monetary base. However, this expansion of the monetary base might not necessarily take place. In order to analyze the impact of debt conversions upon the monetary base, it is important to recognize the different sort of operations that can occur.

For example, consider the direct conversion, in which the original creditor converts its credit into equity investment in the original debtor company. In this case there is no increase in the monetary base. It rather represents a recomposition of the company's capital structure. Even when the investor is a third party, there might be no increase in the monetary base. This will be the case if the debt is not public or publicly guaranteed by the government, and the foreign investor deals directly with the private original debtor. In this case, the dollar denominated debt is automatically converted into equity participation without the intermediation of the government.²³

The inflationary problem arises when the debt is held by the government, i.e., the debt conversion will entail the issuance of local currency. The Brazilian public or publicly guaranteed external debt represented 81.1 percent of the total medium and long-term debt in 1985 (see Table IV-3), a participation which has increased over the last two years.

The local government can follow basically three strategies in order to convert its own external debt: (i) the Central Bank converts the dollar denominated debt into local currency for the foreign investor to proceed with the investment--this results in automatic monetary expansion; (ii) the Central Bank redeems the foreign debt into domestic debt; (iii) the Central Bank follows a mixed strategy of (i) and (ii).

The potential inflationary impact of the first strategy is straightforward. Assuming output and money velocity constant in the short-run, an increase in the monetary base, followed by an increase in the money supply, implies a higher level of prices. It can be argued, though, that even in the short-run the inflationary impact can be offset by a restrictive monetary policy such as increasing bank reserve requirements or working through open market operations.

The second strategy represents an exchange of domestic debt for external debt. In principle, it has no impact on the monetary base. However, it may still be inflationary, due to the possible crowding out the domestic market, which would help to push up the local interest rates. This follows from the additional pressure exerted on the domestic deficit.

In the Brazilian case, the adoption of strategy (i) would have immediate inflationary impact. In a country with a three digit rate of inflation (366 percent in 1987), where the financial assets are highly indexed,²⁴ and where just the monetary correction of the outstanding domestic debt was 12 percent of the GDP in 1984, there is only a very small margin of maneuver for the government to sterilize

the monetary impact through open-market operations (see Table IV-4). However, there is still room for a restrictive monetary policy through the increase of bank reserve requirements.

The entire redemption of converted external debt into domestic debt has its potential disadvantages. In Brazil, it would represent a loss for the country, since the real rate of interest on the local currency bonds is much higher than the interest rate paid on the foreign debt. In Table IV-5 is shown that the real domestic interest rate is more than 2.5 times the average real interest rates on the external debt, in 1985. In sum, if that country follows only strategy (ii) it would exchange expensive domestic debt for relatively cheaper external debt. Furthermore, given the high liquidity of government securities in Brazil, the inflationary pressure would still be present. This stems from the fact that the larger the volume of highly liquid government bonds in the hands of the public, the larger the total credit available in the economy.

On the other hand, the strongest argument in favor of the limited inflationary impact of debt conversion in Brazil is represented by its relatively small size within the Brazilian economy.

The Impact on the Exchange Rate

Theoretically the debt conversion scheme can exert two opposite impacts on the exchange rate. For example, if the debt conversions reach significant levels, the required monetary expansion and consequent inflationary pressures will tend to imply pressures for currency depreciation. On the other hand, the increased demand for domestic

assets, as well as the improvement of the country's external indicators, will work toward a currency appreciation.

Assuming that the Brazilian authorities keep pursuing a purchasing power parity strategy, the debt conversion program should not have any effect on the real exchange rate. At the same time, given the restrictive margin of maneuver for the Brazilian authorities to sterilize the monetary impact of debt conversions, the end result will be a faster rate of depreciation on the nominal exchange rate to keep it in line with the higher rate of inflation.

There is, however, an implicit incentive to keep the domestic currency overvalued, or not to pursue purchasing power parity. The reason is that an overvalued real exchange rate permits the country to retire a larger amount of its foreign debt with a lesser monetary impact. In this case, the result would be an appreciation on the real exchange rate with either a fixed nominal exchange rate or, more likely, a depreciation on the nominal exchange rate lagging behind the increase in the domestic price level.

V. CONCLUDING REMARKS

The analysis undertaken by this study suggests that, based upon the Brazilian experience, the debt conversion strategy cannot be considered as a panacea for the foreign debt problem which plagues many Third World countries. In the Brazilian case, the level of conversions required to solve the foreign debt problem would exert undesirable impacts on the economy such as a substantial increase in foreign ownership of domestic businesses as well as strong inflationary pressures.

However, given the level of indebtedness of countries like Brazil, Mexico and Argentina, as well as the less than successful alternatives provided by the international financial system to deal with the debt problem, the debt conversion strategies turn out to be one more instrument to ameliorate the external debt plight of such nations.

In the case of Brazil, it is important to emphasize that although the debt conversion strategy, considered in isolation, will have a relatively small impact on the debt problem, it can be regarded as an important means of attracting medium and long-term funds at reasonable economic costs.

ENDNOTES

¹The conference was held at The City University, London, in October 1983. Among its participants were central bankers from South America, Europe and U.S., Euromarket leaders and economists from around the world. See Res and Motamens (1984).

²The association of commercial bank loans to floating interest rates, in a world of volatile inflation and interest rates, might explain the high degree of vulnerability achieved by borrowers in the late 1970s. The debt at floating interest rates as a proportion of the total public and publicly guaranteed debt for developing countries changed from 6.4 percent in 1973 to 20.2 percent in 1982. The variance of the London Interbank Offered Rate (LIBOR)--three months, for the same period was around 11.94 points. See World Bank Report (1985).

³The banks' exposure is compared to the banks' capital base. We should note that although the exposure is relatively large with respect to the capital base, it is a modest share of total bank loans. This difference stems from the high leverage of banks, which have assets worth as much as 20 times their capital. See Cline (1984), pp. 21-36.

⁴Since that "black September" in 1982, more than 20 countries have rescheduled their debts. Among them are: Argentina, Brazil, Bolivia, Mexico, Peru, Romania, Turkey, Costa Rica, etc. See World Bank Report (1985), p. 79.

⁵Allan Meltzer recalls the following: "Mismanagement was not confined to local bureaucracies. The policies of the International Monetary Fund spread the debt problem from one country to another by imposing rules of adjustment that make little sense when applied to many countries." He referred to the degree of interdependence among the LDCs, especially in Latin America. Imposing restrictions to Mexico's imports might seriously harm Brazil's exports, and vice-versa. See Res and Motamens (1984), p. 24.

⁶These charges are represented by explicit discounts and transaction costs, as well as an implicit discount through a less favorable exchange rate. There is no standardized procedure undertaken by the local governments, rather each deal carries its own peculiarities. The idea of a "subsidy" stems from the fact that for the foreign investor what matters is neither the size of the original discount (secondary market), nor the discount earned by the local government. He will rather consider the net discount at which he will obtain local currency.

⁷Debt Conversion is a more appropriate term for the operation involving a swap of discounted debt into local currency. This is due to the fact that such operation can take place not only for foreign direct

investment purposes, but also for more general purposes by residents and non-residents of the borrower countries. In the present paper both terms are used to represent the same phenomenon.

⁸These deals included: debt for debt swaps; debt for equity swaps; selling for a mixture of debt and cash; and debt for commodity swaps.

⁹Among the changes in Regulation K of the Bank Holding Act, announced by the Federal Reserve in August 1987, was one allowing the banks to acquire as much as 100 percent of non-financial companies in 33 heavily indebted countries, provided that the companies are being privatized. However, one crucial restriction has not been removed. This is related to the maximum period allowed for the disposition of equity interest contracted abroad which is fixed in five years, while most of countries require the banks to hold the investment for at least 10 years. See American Banker, August 1987.

¹⁰See Jed Horowitz, "Obstacles seen despite easing curbs on debt swaps," in American Banker, v. 152, August 14, 1987, p. 2(1).

¹¹Some analysts believe that this movement was in part precipitated by the Brazilian moratorium declared in February 20, 1987. As Jeffrey Sachs stated, "Brazil's moratorium did produce one good result: it did finally provoke a serious view of what was going on. The commercial banks, with Citicorp in the lead, took a step ahead of the Treasury and of the Federal Reserve, by making provisions for loan losses against LDC debt." See "The Debt Crisis at a Turning Point," in Challenge, May-June 1988.

¹²The total commercial bank lending to the world's 15 most indebted countries is around \$400 billion. The top 15 U.S. banks have a 17.5 percent slice of that--about US \$70 billion.

¹³See Debt Conversion Regulations' Table for additional information concerning the Brazilian, Mexican and Chilean programs.

¹⁴Central Bank Decree Law No. 1994--December 29, 1982.

¹⁵Ministry of Finance Regulation No. 316.

¹⁶For detailed analysis, see Batista in World Bank Discussion Papers #7, pp. 43-44.

¹⁷The restriction was implemented through the Circular Letter of FIRCE (Central Bank's Department of Foreign Capital Supervision and Registration) No. 1125-11/9/1984.

¹⁸Nevertheless, some facts suggest caution. Brazil's Constituent Assembly recently passed protectionist draft resolutions which might limit the foreign participation in the following sectors: mining, shipping and oil drilling (prohibiting risk contracts between the

Brazilian monopoly--PETROBRAS--and the foreign companies). The impact of such resolutions might increase the reluctance of foreign investors to channel new funds to the Brazilian economy. See The Economist, May 7, 1988, p. 66.

¹⁹The auctions are regulated and supervised by the CVM (the Brazilian Stock Exchange Commission). Half of the volume in auction is linked to investments in the Brazilian stock market, and the other half to projects to be developed in priority areas in the North and Northeast of Brazil, under supervision of regional agencies (SUDAM and SUDENE).

²⁰Note that this is different from the discount earned by the foreign investor when he purchases the Brazilian debt in the secondary market.

²¹The reasons for that fact can be listed as follows: (i) maintenance of purchasing power parity through minidevaluation schemes; (ii) comprehensive indexation of financial markets, which eliminate inflation risk; (iii) maintenance of domestic real interest rates over 20 percent, well above international interest rates.

²²The recent proposals received by the Brazilian Securities Commission (CVM) for the formation of such funds include the ones from Merrill Lynch (US \$100 million), Morgan Guaranty Trust Company (US \$50 million), Banco Montreal Investimento, a Brazilian affiliate of that Canadian bank (US \$100 million); and Banco Bozano Simonsen (US \$100 million).

²³Note that the intermediation is referred to in terms of changing the monetary base or of issuing domestic debt. However, in terms of regulation, the deal still requires the approval of competent authorities (in Brazil: FIRCE and CVM).

²⁴"In 1985 the domestic debt of the non financial public sector represented 57 percent of the total gross financial assets outstanding." See Martone (1987), p. 33.

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CHART 1

Sources: OECD 1984 & World Bank

COMPOSITION OF FLOWS TO LDCs

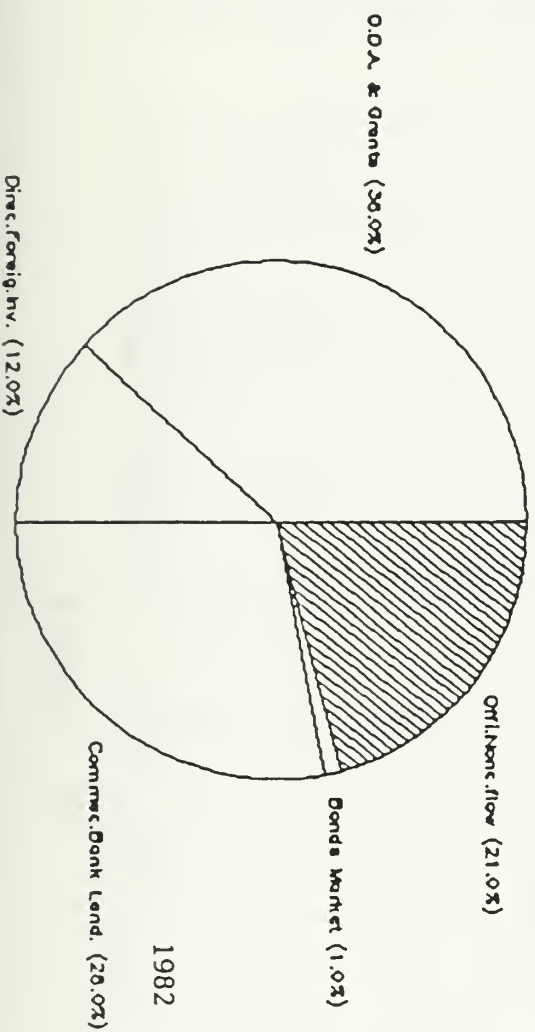
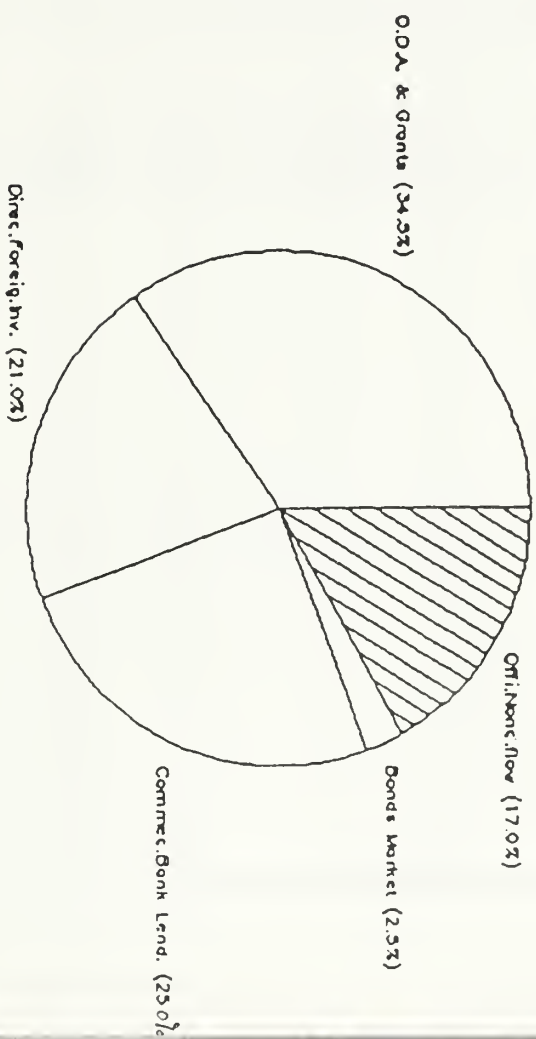
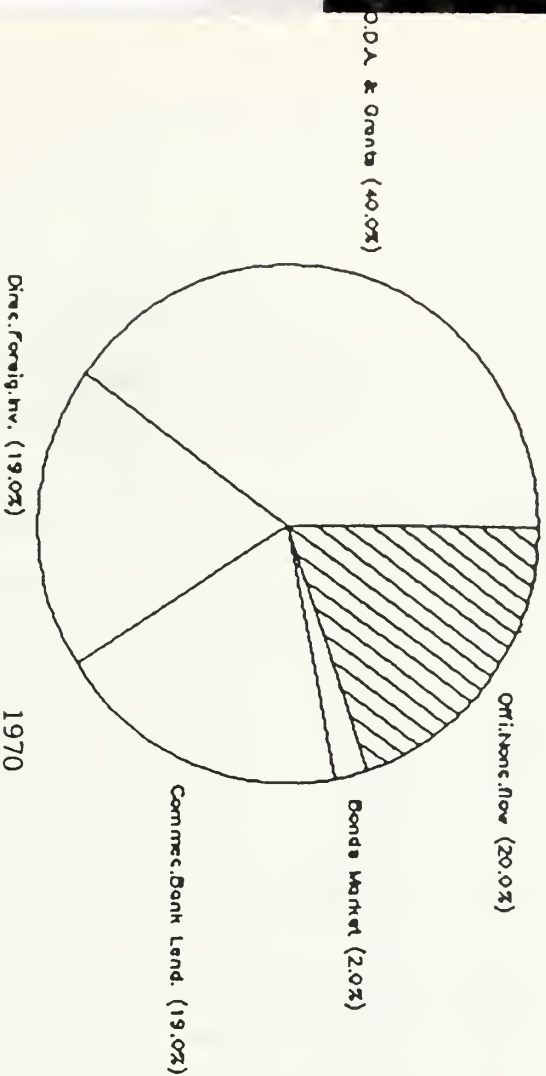
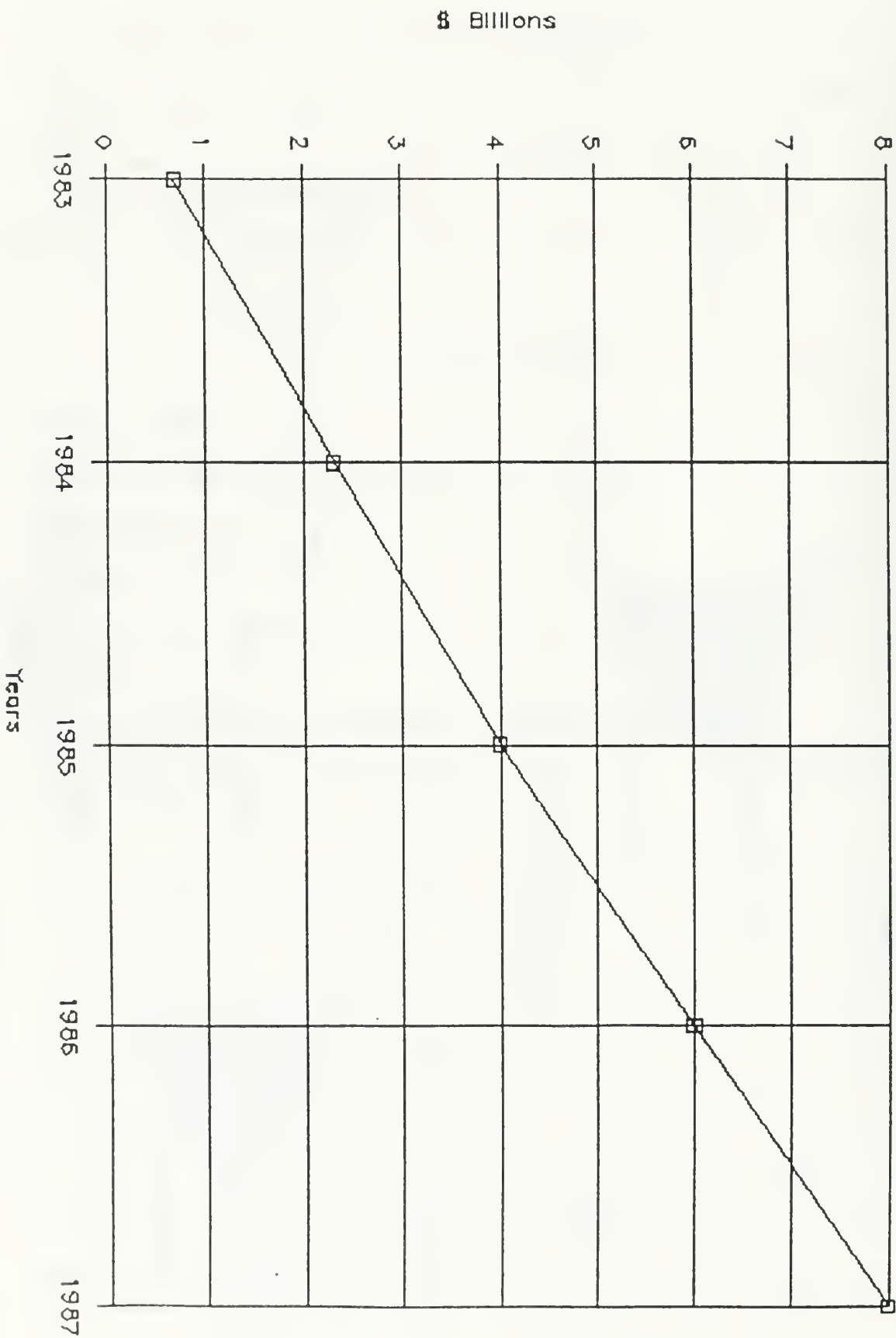


CHART II

VALUE OF SWAPS IN THE SECONDARY MARKET



Source: European Inter-American Finance Corporation, industry estimates

Table II-1

Debt Indicators for Brazil - selected years

(ratio in percent, amount in billion dollars)

	1970	1974	1978	1982	1983
Ratio Debt/GDP	9.6	11.4	15.2	23.5	37.0
Ratio Debt/Exports	150.0	149.6	249.8	328.1	350.5
Debt Service/Exports	33.1	32.3	63.4	90.7	85.3
Total Debt ^a	4.1	11.9	31.6	66.2	79.7
Private Debt/Total ^b	42.0	68.4	80.5	82.8	81.5
Debt at floating interest rates/Total	16.5*	43.2	56.3	70.2	75.2

^aMedium and long-term outstanding debt at the end of the year.

Note: considered net debt (gross debt minus gross reserves of monetary authorities). Includes private nonguaranteed external debt.

^bDebt from financial institutions and other private sources.

*Figure for 1971.

Source: World Bank Report and Banco Central do Brasil.

Table II-2

Exposure of U.S. banks relative to capital base

(percentage, end year)

	1977	1979	1981	1982	Value 1982*
All banks					
East. Europe	16.7	16.1	12.9	8.9	6,278
Nonoil LDCs	114.9	124.2	148.3	146.1	103,181
Sum	131.6	140.3	163.5	155.0	109,459
Mexico	27.4	23.0	34.3	34.5	24,377
Brazil	29.4	27.3	26.9	28.9	20,438
Largest nine					
East. Europe	25.0	23.9	19.5	13.9	4,045
Nonoil LDCs	163.2	182.1	220.6	221.2	64,149
Sum	188.2	206.0	240.1	235.2	68,194
Mexico	32.9	29.6	44.4	44.4	12,262
Brazil	41.9	40.3	40.8	45.8	13,296

*Values are given in US \$ million.

Source: Board of Governors, Federal Reserve System; Country Exposure Lending Survey, various issues.

Table II-3

Market Prices for Developing Countries Debt

(as a percentage of face value)

Country	1985	1986 in quarters				1987 in quarters			
	July	I	II	III	IV	I	II	III	IV*
Argentina	62.5	65	65	65	65	63	58.2	43.5	35.5
Brazil	78	75	74.5	75	76	72	63	51	38
Chile	67	66.5	66	66	66.5	67	68.5	63.2	51.5
Colombia	82	81	81	81.5	—	87.5	87	81.5	75.5
Ecuador	67.5	70	66	64.5	59.5	63.5	53	40	32.5
Mexico	81	67.5	58.5	57	55.5	56.5	57.5	52	49
Peru	47.5	25.5	21.5	19	18.5	17.5	16	8.5	4.5
Philipp.	--	--	--	--	74	74	71	67.2	58.5
Poland	57.5	51.5	47	43.5	42.7	41.7	44	43	41.5
Romania	87	91.5	91	87.5	87.5	87.5	87.5	87.5	86.5
Venezuela	82	80.5	77	75.5	73.5	73	72.5	64	51.5
Yugoslavia	76.5	79.5	78.5	76.5	79	77	77	70	58.5

Note: Figures represent linear average between minimum quotation in the first month and maximum in the third month.

*Excludes December 1987.

Source: Shearson Lehman Brothers.

Table III-1

Debt Conversion and Direct Foreign Investment in Brazil (1978-1986)

(values in million dollars and ratios in percentage)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
(1) Foreign Invest. in Brazil ^a	1,320.5	2,038.6	1,634.4	1,905	1,513.1	1,019	1,235.7	1,056.5	6,29.8
(2) Conversions	159.9	207.4	39.3	1.8	143.2	452	745.6	581.3	220.0
(3) Conversions ^b	--	--	--	--	--	869.7	550.5	179.7	18.8*
(4) (2/1) in %	12.1	10.2	2.4	0.1	9.5	44.4	60.3	55.0	34.9

^aIncludes foreign direct investment, loans and financing, registered at the end of the period.

^bThese figures differ from official data published by the Central Bank of Brazil. The official data (2), consider the date of register of debt converted in the FIRCE (Central Bank's Department of Foreign Capital Regulation and Supervision). Conversions in (3) refer to the date of capitalization in the enterprises.

*Includes only the first two quarters.

Sources: Annual Reports of Central Bank of Brazil and unpublished report of DIPRO.

Table III-2

Breakdown of Debt Converted in Brazil
by Object and Agent - 1982 to 1986

(in thousands of dollars)

1983	Foreign Private Entities	Inter- national Banks	Government Agencies	Others	Total
1) Principal from loans	576,449	65,075	1,175	74	642,773
2) Interest from loans	25,823	1,233	--	--	27,056
3) Principal from financing	196,745	218	--	481	197,444
4) Interest from financing	2,390	23	--	--	2,413
TOTAL	801,407	66,549	1,175	555	869,686
1984					
1)	387,033	67,732	--	--	454,765
2)	7,108	16	--	--	7,124
3)	85,291	--	--	88	85,379
4)	3,260	--	--	--	3,260
TOTAL	482,692	67,748	--	88	550,528
1985					
1)	33,548	121,465	--	--	155,013
2)	1,042	--	--	--	1,042
3)	22,738	274	--	45	23,057
4)	665	--	--	--	665
TOTAL	57,993	121,739	--	45	179,777
1986					
1)	1,730	10,726	--	--	12,456
2)	373	10	--	--	383
3)	--	--	--	--	--
4)	--	--	--	--	--
TOTAL	2,103	10,736	--	--	12,839

Source: Report RINV 904 DIBAP/SEPRO Central Bank of Brazil.

Table IV-1

Capital Flight and Gross Capital Inflows
in Selected Countries, 1979-82

(values in billion dollars, ratio in %)

Country	(A) Capital Flight ^a	(B) Gross Capital inflow ^b	(A)/(B)
Venezuela	22.0	16.1	136.6
Argentina	19.2	29.5	65.1
Mexico	26.5	55.4	47.8
Uruguay	0.6	2.2	27.3
Portugal	1.8	8.6	20.9
Brazil	3.5	43.9	8.0
Turkey	0.4	7.9	5.1
Korea	0.9	18.7	4.8

^aFigures are estimated by The World Bank. Capital Flight is defined as the sum of gross capital inflows and current account deficit, less increase in reserves.

^bDefined as the sum of changes in gross foreign debt (public and private) and net foreign direct investment.

Source: World Bank Data. See World Development Report 1985, p. 64.

Table IV-2

Direct Foreign Investment and Reinvestment
Registered in Brazil^a

(in billion dollars)

Period	Investment	Reinvestment	Total ^b
Dec 83	15.40	6.75	22.30
Jun 84	16.14	6.71	22.85
Dec 84	16.34	6.50	22.84
Jun 85	16.82	6.87	23.68
Dec 85	17.92	7.74	25.66
Jun 86	18.67	8.34	27.05
Dec 86	19.18	8.71	27.89

^aStock of foreign investment registered at the Brazilian Central Bank at the end of the period.

^bNumbers may not add because rounding.

Source: Banco Central do Brasil.

Table IV-3

Brazilian Public and Publicly Guaranteed Debt, 1980-85

(in billion dollars)

	1980	1981	1982	1983	1984	1985
Total External Debt	70.2	79.9	91.4	97.8	103.5	106.7
Medium & long-term	56.7	64.6	73.3	81.0	87.8	91.1
Public & Publicly G.	40.1	44.8	50.2	59.5	68.5	73.9
Private non guarant.	16.6	19.8	23.1	21.5	19.3	17.2
Use of IMF credit	0.0	0.0	0.5	2.6	4.2	4.6
Short Term Debt	13.5	15.3	17.4	14.2	11.5	11.0

Source: IBRD/DRS - World Bank data.

Table IV-4

Brazil - Consolidated Accounts of the Federal Government

(in billions of cruzados)

	1980	1981	1982	1983	1984
(A) <u>Total Receipts</u>	3.67	7.65	16.17	38.09	114.75
<u>Tax Revenues</u>	3.11	6.04	12.77	29.39	84.24
Others	0.56	1.61	3.40	8.70	30.51
(B) <u>Total Expenditures</u>	3.93	8.42	17.92	42.44	135.14
Operational	3.70	7.87	16.26	37.49	110.89
Interest Payment and Monetary Correction ^a	0.23	0.55	1.66	4.95	24.25
(C) <u>Overall Balance</u> (C=A-B)	-0.26	-0.77	-1.75	-4.35	-20.39
(D) <u>Non-financial</u> <u>Overall Balance</u> (D=C excluding Inter. and M.C.)	-0.03	-0.22	-0.09	0.60	3.86
Monetary Correction on Domestic Debt	--	1.058	3.16	10.56	46.59
(as a % of GDP)	--	4.1	6.2	8.8	12.0

^aIncludes only monetary correction on indexed bonds (ORTNs) that was actually paid in the period.

Sources: Getulio Vargas Foundation and Ministry of Finance.

Table IV-5

Interest Rates on Foreign and Domestic Public Debt

(in percentage)

	Domestic Interest Rates Deflated by GPI/DI - CDBs ^a	Average Real Interest Rates on MLT Debt ^b
1979	-10.0	-3.2
1980	-2.5	-3.1
1981	4.9	3.2
1982	29.8	10.9
1983	-3.7	8.4
1984	23.7	6.0
1985	26.1	9.7

^aCDBs stands for Brazilian Certificates of Deposit.

^bInterest paid on medium and long-term debt/outstanding medium and long-term debt, in real terms.

Source: Central Bank of Brazil, Conjuntura Economica and World Bank Calculations.

DEBT CONVERSION REGULATIONS TABLE

<u>Country Legislation</u>	<u>Eligible Debt</u>	<u>Eligible Investors</u>
----------------------------	----------------------	---------------------------

<u>Mexico</u>		
May 1986. Clause 5.11 New money agreements and restructure agreements.	Direct debt of United States of Mexico (a) under new money agree- ments (b) under re- structure agreements.	Holders of debt and non- resident entities and individuals.
<u>Brazil</u>		
Central Bank resolution No. 1460 effective on Nov 11/87.	Credits covered by rescheduling agree- ments of the Brazilian Foreign Debt.	Non-residents foreign creditors and investors.
<u>Chile</u>		
Decree Law 600 (Foreign Investment Statute) Chapter 14 (Compendium of Foreign Exchange Regulations of the Banco Central de Chile). Chapters 18, and 19.	Foreign currency de- nominated paper, in hands of creditors with maturity greater than 1 year. All debts eligible except for a) official credits; b) loans from multilateral organiza- tions; c) loans with less than one year to maturity.	Non-residents and residents.

Source: Based on information published by Trade Finance, Sept. 1987.
Updated in April 1988 for Brazil.

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